

CATALYST AND PROCESS FOR SELECTIVE HYDROGENATION**ABSTRACT**

A selective hydrogenation catalyst composition comprises a support; a first metal component comprising rhodium; and a second metal component comprising a metal other than rhodium and selected from Groups 1 to 15 of the Periodic Table of Elements, wherein said first and second components are predominantly contained in an outer surface layer of the support having a depth of not more than 1000 microns.